

The cost savings following the use of Iodixanol compared to Iopromide in coronarography averaged 2287 RUB (72 USD) in common population, 2866 RUB (USD91) in patients with CKD, and 3427 RUB (US\$109) in patients with diabetes mellitus and CKD. **CONCLUSIONS:** The results of this study demonstrated Iodixanol to be cost-saving compared to low-osmolar contrast media both in risk groups and in general population.

PCV58**TRIAL-BASED ECONOMIC EVALUATION ALONGSIDE THE TCYB (TAKE CONTROL OF YOUR BLOOD PRESSURE) TRIAL**

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OBJECTIVES: The Take Control of Your Blood Pressure trial randomized 636 community-dwelling individuals with hypertension to evaluate the impact of a telephonic behavioral self-management intervention, home blood pressure monitoring, and both interventions combined compared to usual care on reducing systolic blood pressure (SBP) over 24 months. At 24 months, the combined intervention demonstrated a significant 3.9 mmHg (95%CI: 0.9,6.9) reduction in SBP relative to usual care. Patients randomized to home BP monitoring or the behavioral intervention had less improvement (0.6 mmHg and -0.6 mmHg, respectively). A prospective economic evaluation was performed. **METHODS:** Measures of medical resource use costs were derived from electronic data representing medical care delivered within the Duke University Health System. Intervention-related costs, including patient time, were estimated using patient-level data collected during the trial, administrative records, and published unit costs. Sensitivity analyses were conducted to evaluate the impact of changing assumptions about overhead costs and time between completed phone encounters when estimating costs associated with the behavioral intervention. **RESULTS:** On average, over 24 months, patients incurred \$6,965 (SD = 22,054) in inpatient costs and \$8,676 (SD = 9,368) in outpatient costs, with no significant differences across intervention groups. When applying base-case assumptions, 24-month intervention costs were estimated to be \$90 (SD = 2) for home blood pressure monitoring, \$345 (SD = 64) for the behavioral intervention (\$31 per phone encounter) and \$416 (SD = 93) for the combined intervention. In sensitivity analyses, the cost for each phone encounter ranged from approximately \$10 to \$45. Patient time costs were estimated at \$585 (SD = 487) for home monitoring, \$55 (SD = 16) for the behavioral intervention and \$741 (SD = 529) for the combined intervention. **CONCLUSIONS:** Home blood pressure monitoring and/or the behavioral intervention had little impact on medical resource use or costs over 2 years. Our analysis demonstrated that these interventions are cost-additive to the health care system and that patients' time costs are considerable.

PCV59**ECONOMIC ANALYSIS OF THE ENDEAVOR DRUG-ELUTING STENT VS. THE DRIVER BARE METAL STENT: RESULTS FROM THE ENDEAVOR II TRIAL**

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OBJECTIVES: To assess the economic attractiveness of the Endeavor drug-eluting stent (DES) vs. the Driver bare metal stent (BMS) using 4-year follow-up information from the ENDEAVOR II clinical trial. **METHODS:** We used clinical, index procedure and follow-up events data from subjects randomized to receive Endeavor (n = 598) vs. Driver (n = 599), and applied Medicare cost and quality of life adjustments from secondary sources. We compared differences in clinical endpoints, medical costs, and quality adjusted survival through 4 years follow-up (1440 days). **RESULTS:** Patients in both treatment groups had similar baseline characteristics. The use of Endeavor vs. Driver reduced 4-year target vessel revascularization (TVR) rates per 100 subjects (10.4 vs. 21.5; difference, -11.1; 95% confidence interval [CI], -16.0 to -6.1; p < .001), with no difference in the rates per 100 subjects of death (5.0 vs. 5.2; difference, -.2; 95% CI, -2.4 to 2.7; p = .90) or non-fatal myocardial infarction (MI) (3.2 vs. 4.4; difference, -1.2; 95% CI, -3.4 to 1.0; p = .29). After discounting at a 3% annual rate, there were no differences in quality-adjusted survival days (1093 vs. 1090; difference, 3; 95% CI, -13 to 19; p = .69) and total medical costs (\$21,483 vs. \$21,680; difference, -\$198; 95% CI, -\$1608 to \$1207, p = .78). **CONCLUSIONS:** The use of Endeavor vs. Driver was associated with a significant reduction in TVR through four years follow-up with no difference in death, non-fatal MI, quality-adjusted survival, or total medical costs. These results are comparable to those for other studies comparing DES vs. BMS.

PCV60**ECONOMIC ANALYSIS OF ENDEAVOR VS. CYPHER STENTS: RESULTS FROM THE ENDEAVOR III TRIAL**

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OBJECTIVES: To evaluate the economic attractiveness of Endeavor vs. Cypher drug-eluting stents (DES) in the ENDEAVOR III clinical trial. **METHODS:** We analyzed case report form information from subjects randomized to receive Endeavor (n = 323)

vs. Cypher (n = 113) stents, using quality of life adjustment and Medicare cost weights applied from secondary sources, and a \$2100 cost for stents. We compared differences in outcomes and costs; and evaluated cost-effectiveness through 3-years follow-up (1080 days). **RESULTS:** The use of Endeavor vs. Cypher stents reduced the 3-year rates per 100 subjects of death or myocardial infarction (MI) (3.9 vs. 10.8; difference, -6.9; 95% confidence interval [CI], -0.8 to -9.9; p = .028), with no difference in target vessel revascularization rates (17.9 vs. 12.2; difference, 5.7; 95% CI, -3.9 to 15.1; p = .23), but greater use of coronary artery bypass graft surgery (3.5 vs. 0.0; difference 3.5; 95% CI, 1.3 to 5.7; p = .002). After discounting at 3% per annum, total medical costs for Endeavor vs. Cypher were similar (\$23,353 vs. \$21,657; difference, \$1696; 95% CI, -\$1089 to \$4482, p = .23), and the 3-year cost-effectiveness ratio was \$57,002 per quality-adjusted life year. **CONCLUSIONS:** Use of Endeavor vs. Cypher led to reductions in death or MI, with no differences in other outcomes. These findings are unexpected in DES comparisons. If future trials observe similar differences, the use of Endeavor vs. Cypher will be economically attractive by conventional standards.

PCV61**MEDICAL EXPENDITURES ATTRIBUTABLE TO CORONARY ARTERY DISEASE IN THE UNITED STATES**

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OBJECTIVES: This study estimated medical expenditures attributable to coronary artery disease (CAD) in the US and investigated CAD case definition in a nationally representative sample. **METHODS:** Data from 2005 from the nationally representative Medical Expenditure Panel Survey (MEPS) were used to estimate the population with CAD and their medical expenditures. CAD cases were identified by patient-reported myocardial infarction (MI), angina pectoris and/or coronary heart disease (CHD). Case definition analysis used multivariable logistic regression. Person-level and national expenditures were estimated on a logarithmic scale using a maximum likelihood Heckman selection model and Smearing re-transformation. All analyses employed Taylor series linearization methods to account for the complex survey design and adjusted for age, race, ethnicity, gender, income, education, and overweight status. **RESULTS:** In the 2005 civilian noninstitutionalized adult population (n = 22262), there were 1016 CAD cases using a strict definition of either MI or angina and 1266 cases using a broad definition including patient-reported CHD. Of those reporting CHD (n = 702), only 65% (n = 458) had MI or angina. Females and blacks reporting CHD were less likely to have MI or angina (OR = 0.52, 0.39, p < 0.01). Annual direct medical expenditures attributable to strictly defined CAD were estimated to be \$6456 (\$2007), on average, per person. Expenditures for broadly defined CAD were \$6453 (\$2007). Based on this estimate and the weighted estimate of persons with CAD (approximately 9.8 million), the projected annual US medical expenditures attributable to CAD are \$63 billion (\$2007). **CONCLUSIONS:** While CAD and CHD are generally diagnosed by either MI or angina, patient-reported CHD is not consistent with this definition. Consistency appears to vary with gender and race. While the CAD case definition varies, expenditures do not. Results of this study indicate that direct medical expenditures associated with CAD in the US are substantial.

PCV62**IDENTIFYING DRIVERS OF POST-HOSPITAL DISCHARGE FOR PATIENTS WITH ACUTE CORONARY SYNDROME (ACS) USING QUANTILE REGRESSIONS**

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OBJECTIVES: To identify drivers of post-hospital costs among ACS patients, including treatment type received. Patients who are hospitalized with ACS have different treatment options, including revascularization procedures. While these procedures are expensive, there might be offsets in future health care costs by preventing adverse coronary events. **METHODS:** We studied commercially insured individuals, aged 18-64, with 36 months continuous enrollment in a large, geographically diverse health plan between January 2003 and December 2006. Patients were identified if they were hospitalized between January 1, 2004 and December 31, 2005 with a diagnosis of ACS. A 1 year follow-up period was used and costs incurred after patients' initial hospital discharge were examined. In addition to ordinary least squares (OLS), quantile-regression models (QRM) were used to identify drivers of post-hospital costs. QRM make no assumption about the distribution of the error term and provide quantile-specific covariate effects, which is useful in applications with highly skewed data. **RESULTS:** OLS results indicated co-morbidity scores, prior health care costs and initial hospital diagnosis were main drivers of post-hospital discharge costs (p < 0.01). Also, revascularization procedures during the initial hospitalization were not significantly associated with post-hospital costs. QRM confirmed the other findings but showed, at the lower end of the post-hospital costs distribution, having revascularization procedures during the initial hospitalization was significantly associated with higher post-hospital costs. This effect was not significant in the upper quantiles. **CONCLUSIONS:** In this study, initial hospital diagnosis, higher co-morbidity scores and prior health care costs were associated with higher post-hospital costs. Also, QRM showed revascularization procedures were drivers of cost for patients with lower post-hospital expenditures. This is an intuitive finding considering patients who have revascularization procedures may have more follow-up care compared to those without revascularization. However, these patients may have fewer secondary events requiring hospitalization, thus keeping them in the lower cost quantiles.